Applicant: Georgopoulos et al

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Please add the following new claims:

42. (New) The method of claim 18, wherein the mammal is homozygous for a deletion of exon 7 of the Aiolos gene or a portion thereof.

- 43. (New) The method of claim 29, wherein the mammal is homozygous for a deletion of exon 7 of the Aiolos gene or a portion thereof.
- 44. (New) The method of claim 35, wherein the mammal is homozygous for a deletion of exon 7 of the Aiolos gene or a portion thereof.

REMARKS

Claims 18-44 are panding. Claims 1-17 have been cancelled without prejudice. Claims 18, 21, 22, 24, 27, 28, 29, 31, 32, 34, 35, 39, and 40 have been amended. However, the cancellation of and/or amendment to the claims have been made solely to expedite prosecution of the present application. No new matter has been added.

Rejection of Claims 18-41 Under 35 U.S.C. §101

Claims 18-41 are rejected under 35 U.S.C. §101 "because the claimed invention is not supported by either a specific asserted utility or a well established utility." In particular, the Examiner states that

Applicant's invention is drawn to obtaining antibodies from animals, wherein the animal has a gene, the Aiolos gene that is deregulated and therefore leads to unregulated antibody production. However, the reason antibodies are such a powerful tool in biotechnology is due to their specificity. Without knowing the specificity of the antibody to be obtained is, the invention has no specific, credible or substantial use, and therefore has no utility. Furthermore, antibodies are made from B lymphocytes, so isolating antibodies from any other cell in the body is not possible.

Applicants have amended the claims to specify that the animal having a cell which is Aiolos deregulated further has an antigen, and that the antibody isolated from the animal, or from Applicant: Georgopoulos et al

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a hematopoietic cell derived from the animal, be an antibody against that antigen. In view of such amendments, it is clear that the claimed invention has a specific and well-established utility, i.e., obtaining antibodies against an antigen. Therefore, Applicants respectfully request that the Examiner withdraw this rejection.

Rejection of Claims 18-20, 22-30, 32-38 and 40-41

Claims 18-20, 22-30, 32-38 and 40-41 are rejected under 35 U.S.C. §112, first paragraph. According to the Examiner, "since the invention is not supported by either a specific asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention."

As discussed above, as amended, the claimed invention does have a specific and wellestablished utility. Therefore, Applicants respectfully request that the Examiner withdraw this rejection.

The Examiner further asserts that claims 24 and 34 "contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." In particular, the Examiner states that

Applicant argues they have disclosed many algorithms which may be used to determine percent homology between two proteins. However, when the public tries to practice the invention, which algorithm? Each algorithm would likely gives different answers. So one of skill in the art would not be able to practice Applicant's invention without more specific guidance.

Claims 24 and 34 have been amended to recite the algorithms which can be used to determine the percent homology, thereby obviating this rejection.

Rejection of Claim 24 Under 35 U.S.C. §112, second paragraph

Claim 24 is rejected under 35 U.S.C. §112, second paragraph "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as Applicant: Georgopoulos et al.

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the invention." In particular, the Examiner asserts that proper antecedent basis for the term "antigen" does not exist.

Claim 24 has been amended such that it contains the proper antecedent basis for the term "antigen", thereby obviating this rejection. Therefore, Applicants respectfully request that the Examiner withdraw this rejection.

Conclusion

Applicant submits that all of the claims are now in condition for allowance, which action is requested. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: <u>2/12/01</u>

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